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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,907	11/13/2001	Takeshi Mitsuishi	8071.0007	6647

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EXAMINER

PRITCHETT, JOSHUA L

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/986,907	Applicant(s) MITSUBISHI ET AL.	
	Examiner Joshua L Pritchett	Art Unit 2872	<i>aw</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-17 (as they depend from claim 1) is/are rejected.
- 7) ☒ Claim(s) 6-8 and 9-17 (as they depend from claims 6 and 8) is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to Amendment filed December 24, 2003. All applicant's arguments have been considered.

Claim Objections

Claim 17 is objected to because of the following informalities: claim 17 is a Markush claim and must therefore have the phrase "a group consisting of" following the term "from" in line 1 of the claim to be properly formatted. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Belleville.

Regarding claim 1, Belleville teaches a composition comprising niobium oxide, zirconium oxide, and yttrium oxide (col. 7 lines 4-15).

Regarding claim 2, Belleville teaches a composition comprising aluminum oxide (col. 7 lines 4-15).

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Regarding claims 3-5, Belleville teaches a composition comprising 60-90% by weight niobium oxide, 5-20% by weight zirconium oxide or 5-35% by weight yttrium oxide (col. 7 lines 13-14). Belleville teaches that any of these oxides may be present in amounts ranging from 1-99% by weight. Therefore the amount of any one specific oxide would be anticipated by Belleville.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 9/1 and 10-14/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belleville in view of Rahilly.

Regarding claim 9/1, Belleville teaches the use of vaporization of the compound (col. 1 lines 54-56) and deposition of the vapor onto the substrate (col. 1 line 51-53). Belleville lacks reference to the use of sintering of the compound prior to vaporization. Rahilly teaches the use of sintering an antireflective compound prior to applying the compound to a substrate (col. 3 lines 23-28). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use sintering as taught by Rahilly to form a solid mass of the compound prior to vaporizing the compound and depositing the compound on the substrate as taught by Belleville for the purpose of having a more uniform composition throughout the layer on the substrate and therefore obtaining more reliable results.

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Regarding claim 10, Belleville teaches the substrate being made of plastic (col. 9 lines 16-17).

Regarding claim 11, Belleville teaches the plastic substrate having one or more coating layers (Fig. 4).

Regarding claim 12, Belleville teaches an ion-assisted process (col. 1 lines 56-57).

Regarding claims 13 and 14, Belleville teaches an alternating layer fashion (Fig. 4) and at least one layer of silicon dioxide (col. 16 lines 1-3).

Claims 15-17/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belleville in view of Rahilly as applied to claims 9/1 and 12/1 above, and further in view of Asai.

Regarding claims 15 and 16, Belleville in combination with Rahilly teaches the invention as claimed but lacks reference to the use of a hard coat layer. Asai teaches the use of a hard coat layer (col. 1 lines 33-34). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the Asai hard coat layer in the Belleville invention for the purpose of giving the antireflective element greater durability.

Regarding claim 17, Belleville teaches the optical element being a lens for spectacles (col. 13 line 36).

Allowable Subject Matter

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Claims 6-8, 9-17/6 and 9-17/8 (as they depend from claims 6 or 8) are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 6, claim 6 is allowable over the prior art of record because the prior art fails to teach or suggest the claimed weight percent of each oxide in the composition. Belleville is sufficient to teach the weight percent of any single oxide from 1-99%, but is not sufficient to teach the claimed weight percent composition involving the three separate oxides.

Regarding claims 7-8 and 9-17/6, claims 7-8 and 9-17/6 depend either directly or indirectly from claim 6 and are therefore allowable for the same reasons as claim 6.

Response to Arguments

Applicant's arguments filed December 24, 2003 have been fully considered but they are not persuasive.

On pages 1 and 2 of Amendment, applicant argues that claim 17 meets the requirements under 35 U.S.C. 112 second paragraph. This argument is moot because the claim was not rejected under 35 U.S.C. 112 second paragraph. Claim 17 was objected to as being a Markush claim, but lacking the proper wording of the claim language. The standard for claim objections and claim rejections under 35 U.S.C. 112 second paragraph are not the same.

On pages 2 and 3 of Amendment, applicant argues that the mere listing of the claimed oxides as possible additions to the composition of Belleville is not enough to anticipate the claim. The applicant further argues that because there is a total of 2,047 possible combinations

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based on the Belleville disclosure the claim does not read on the prior art. If any one of the possibilities disclosed by Belleville meet the claim limitations then the claims do read on the prior art. The following is an excerpt from the MPEP 2131.02.

A genus does not always anticipate a claim to a species within the genus. However, when the species is clearly named, the species claim is anticipated no matter how many other species are additionally named. *Ex parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990) (The claimed compound was named in a reference which also disclosed 45 other compounds. The Board held that the comprehensiveness of the listing did not negate the fact that the compound claimed was specifically taught. The Board compared the facts to the situation in which the compound was found in the Merck Index, saying that "the tenth edition of the Merck Index lists ten thousand compounds. In our view, each and every one of those compounds is described" as that term is used in 35 U.S.C. § 102(a), in that publication."). *Id.* at 1718. See also *In re Sivaramakrishnan*, 673 F.2d 1383, 213 USPQ 441 (CCPA 1982) (The claims were directed to polycarbonate containing cadmium laurate as an additive. The court upheld the Board's finding that a reference specifically naming cadmium laurate as an additive amongst a list of many suitable salts in polycarbonate resin anticipated the claims. The applicant had argued that cadmium laurate was only disclosed as representative of the salts and was expected to have the same properties as the other salts listed while, as shown in the application, cadmium laurate had unexpected properties. The court held that it did not matter that the salt was not disclosed as being preferred, the reference still anticipated the claims and because the claim was anticipated, the unexpected properties were immaterial.).

The MPEP clearly states "when the species is clearly named, the species claim is anticipated no matter how many other species are additionally named." Belleville clearly states that niobium oxide, zirconium oxide, and yttrium oxide can exist together in a composition; therefore the claim is anticipated.

On page 3 of Amendment, applicant argues that the Belleville lacks teaching of the claimed weight percent of the composition. Belleville teaches that any of the additive listed, including niobium, zirconium and yttrium oxides, may exist in any amount between 1 and 99 percent.

On pages 4 and 5 of Amendment, applicant argues that Belleville and Rahilly are not combinable because they teach different methods of deposition and that the fact that both Rahilly

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and Belleville teach the use of a tantalum oxide composition as the material to deposit does not overcome this discrepancy. The examiner holds that because the two references teach the use of the same base oxide in the deposition process, namely tantalum oxide, one of ordinary skill in the art would recognize that the references are combinable. The applicant argues that there is no motivation to combine the two references. The examiner provided the motivation for combining the two references in the Office Action dated March 24, 2003 as being to provide a more uniform composition throughout the layer and therefore obtain more precise results from the use of the composition.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 571-272-2318.

The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLP 


DREW A. DUNN
SUPERVISORY PATENT EXAMINER